

Crossing Paths



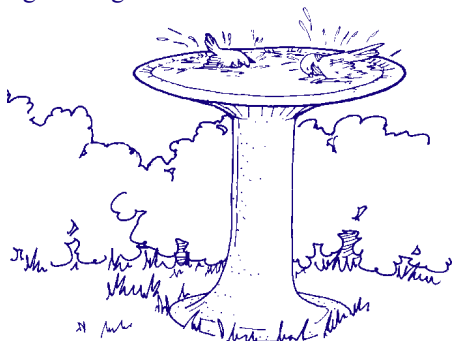
WITH WILDLIFE IN WASHINGTON TOWNS AND CITIES

Fall 2001

Fall is water maintenance time

Water may be the most critical provision you can make in your backyard for wildlife, especially during a drought year like this one.

All animals need drinking water, but some use it for other reasons. Although birds eat snow and melting ice to get water in winter, an open water source is used for drinking and especially for bathing. Many birds bathe, even in the winter, to keep feathers clean so they retain body heat better. Many insects, fish, reptiles and amphibians live at least part of their lives in water, even "hibernating" through winter in wet areas.



Whether you provide water in a simple birdbath or a full-fledged, pump-maintained pond, fall is the best time to do major maintenance work on your system. It's the end of the growing season, so you won't be disturbing pond plants or wildlife families. And thorough cleaning, repair, and replacement is important at this time to ready your bath or pond for winter use.

Trouble-free winter use of a **birdbath** starts with your type or design choice. A birdbath can be almost anything that holds water, from an upside down frisbee to an elaborate stone sculpture. Whatever form it takes, certain features are crucial:

- Birds prefer a birdbath with beach-like margins that slope gradually, allowing

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Are we reaching you? "Roundtables" to help WDFW gauge public connections

by Jeff Koenings, WDFW Director

The world keeps changing, probably both for better and for worse.

In the fish and wildlife management world, resource use has been changing for many years now. Today less than 25 percent of Washingtonians fish and less than four percent hunt. But now more than 80 percent of our state's residents enjoy fish and wildlife in other ways: viewing, photographing, and yes, providing habitat for them in their own backyards like you do.

Part of our job at the Washington Department of Fish and Wildlife (WDFW) is to make sure we're reflecting these kinds of changes and connecting with all the different publics we serve.

Do our public involvement efforts in decision-making processes provide enough opportunity for different ideas to be heard?

Is there adequate interpersonal communication between WDFW staff and you?

Are the information products we provide sufficient?

Are we reaching you?

I'm seeking answers to these and other questions so that I can gauge our public

connections and determine what we need to do better or different in the future.

To that end, this fall I'm conducting a series of "Director's Roundtables" across the state to discuss how WDFW is doing in the public communication and involvement realms with invited representatives of a wide variety of interests - agriculturists, animal lovers, business, educators, environmentalists, fishers, hunters, landowners, local government officials, outdoor recreationists. These sessions are open to the public, too, but individuals have been invited to make sure all voices are heard.

WDFW's website (www.wa.gov/wdfw <<http://www.wa.gov/wdfw>>) has more detailed information about the roundtables, which will be held from October 22 through November 16. You can give us your input through the website, using our roundtable questionnaire or just sending an e-mail, or you can plan on attending a roundtable in your region.

With what you do for wildlife in your backyard, you are among our most active constituents. I'd appreciate hearing from you so that WDFW can serve you and others better.

Crossing Paths is a twice-yearly newsletter for Washington residents enrolled in the Backyard Wildlife Sanctuary Program.

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Crossing Paths Newsletter

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Washington
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**FISH and
WILDLIFE**

Living with Washington's wildlife: Raccoons

(Editor's note: WDFW's Seattle-area urban wildlife biologist Russell Link is compiling a series of "Living With Washington's Wildlife" factsheets for distribution at regional offices that will eventually be part of a new book, "Living With Wildlife in the Pacific Northwest." This newsletter will regularly feature excerpts since many BWS managers have asked for help when some wildlife becomes too much of a good thing!)

The raccoon (*Procyon lotor*) is a native mammal about 3 feet long, (including its 12-inch long tail) with an average adult weight of 20 pounds. The black "mask" and bushy ringed tail is distinctive. Because the hind legs are longer than the front legs, raccoons have a hunched appearance when they walk or run. Each of their front feet contains five dexterous toes, allowing raccoons to grasp and manipulate food and other items.

Raccoons prefer forest areas near perennial streams or bodies of water, but have adjusted to various environments throughout the Pacific Northwest. Raccoon populations grow quite large in urban areas with hunting and trapping restrictions, few predators, and human-supplied food.

Raccoons eat small mammals such as gophers, squirrels, mice, and rats; also carrion, insects, crayfish, crabs, frogs, fish, birds and bird eggs. Their vegetable diet consists of fruits, vegetables, nuts, and seeds. Garbage and pet food is a common element of their diet around human habitation.

Raccoons can be seen near shallow fresh or salt water, using their front feet to search out aquatic foods. Because raccoons also frequently moisten food items in water, there is a misconception that they "wash" their food before eating it. When water is not available, however, they use many of the same motions in handling food.

Raccoons are typically nocturnal although they are sometimes seen during the day. Their peak feeding activity generally occurs before midnight. Often only their five-toed tracks are seen - 2-3 inches long from front feet, 3-4 inches long from hind feet which have a "heel"

much like a human foot print. Sometimes these tracks appear as smudge marks on the side of a house where a raccoon shimmies up a downspout or utility pipe. Sometimes only their droppings are seen - crumbly, flat-ended, the diameter of your little finger, 3-6 inches long but usually broken in segments.

Raccoons pair only during the breeding season and except for females with young, they are usually solitary. However, their home ranges tend to overlap and they may den together during winter storms. Individuals may also feed to-



gether at a concentrated food source.

Raccoons make dens in hollow trees, rock crevices, large brush piles, wood duck boxes, or use den sites created by other animals. In urban areas, raccoons will use storm sewers, crawl spaces, chimneys, and attics. During extreme weather, or when a mother is dened with her young, raccoons do not occupy the same den for more than 1 or 2 days. Raccoons do not hibernate.

Female raccoons generally give birth between April and June with an average litter of 2 to 3 young. The young remain in their birth den until they are about 7 weeks old, at which time they can walk, run, and climb and begin to occupy a series of alternate dens.

Raccoon predators include mountain lions, bobcats, coyotes, domestic dogs, large owls and eagles. Hunters, trappers, and automobiles also take raccoons. Most raccoons in the wild live less than 5 years.

Young raccoons are cute, intelligent, and curious. However, they are wild animals, not meant to be pets, and making

them so is illegal in Washington.

Problems and Solutions

A raccoon's search for food may bring it into an area with crops, a pond, or a yard with chickens or ducks. Its search for a den site may bring it into an attic, chimney, or crawl space. The most effective way to deal with potential conflicts is to modify the habitat around your home so that raccoons won't be attracted to human-provided sources of food and shelter.

Feeding raccoons is highly discouraged. Raccoons that are fed often lose their fear of humans, and develop a territorial attitude which may lead to aggressive behavior. Feeding also tends to concentrate raccoons in a small area. Overcrowding can result in increased diseases or parasites which may be transmitted to pets or humans.

There has not been a recorded case of rabies in a Pacific Northwest raccoon population, but they may carry other diseases. Raccoons can be a host for the parasitic roundworm which can infect a person who accidentally ingests or inhales eggs that are passed through raccoon droppings. Prevention consists of never touching or inhaling raccoon droppings, using rubber gloves and a mask when cleaning areas which have been occupied by raccoons, and keeping young children and pets away from areas with high concentrations of raccoons. Raccoons also carry the canine distemper virus, and the best prevention for this is to have your dogs vaccinated and keep them away from raccoons.

As long as raccoons are kept out of human homes, not cornered, and not treated as pets, they are not dangerous. Children should be told not to approach,

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Thanks for contributions!

Thanks to everyone who contributed anecdotes, stories, and other information to WDFW's "Living With Wildlife in the Pacific Northwest," compiled by urban wildlife biologist Russell Link. The book is scheduled to be out next spring.

The count will soon be on

WDFW's 9th annual backyard winter bird feeding survey starts in November.

If you've been part of this fun data collection effort, you'll be receiving your count forms in the mail soon.

If you'd like to join the effort, mail us a postcard with your name and address to "Winter Backyard Bird Survey," WDFW, 16018 Mill Creek Blvd., Mill Creek, WA 98012; or send e-mail to:

thomppat@dfw.wa.gov

The deadline for mailing is Oct. 25.

It's really easy: just watch your backyard bird feeders carefully for a couple of days every other week through the season, record numbers of species, and return data forms to us in the spring. An Internet e-mail system for submitting data is in the works to make your contribution to this survey even easier (hopefully for 2002!)

Help birds at café concerts

The Songbird Foundation, Northwest Shade Coffee Campaign and TransFair USA are sponsoring café concerts on Thursday nights in western Washington to raise money for the Sustainable Coffee Campaign, Coffee Kids, and Trees for the Future. (Remember, shade-grown coffee provides winter habitat for our summer songbirds.)

All of the following 7-10 pm concerts are free, with donations encouraged for the shade-grown coffee cause.

Oct. 25 Still Life Coffee House (709 N. 35th St., Fremont) SisterMonk Harem & Jean Mann

Nov 1 Caffè Appassionato (4001 21st Ave. West, Seattle) Alice Stuart & Brad Warren

Nov 8 Stuarts Coffee House (1302 Bay Street, Bellingham) Smason & Klein, & Kathryn Mostow

Nov 15 Tullys at Bella Botega (8862 161st Ave. NE, Redmond) Larry Murante & Liquid Voodoo

Nov 29 Traditions Cafe (300 5th Avenue SW, Olympia) Danny O'Keefe & Jacques Larrainzar

Plus: Nov. 30 Zoka Coffee Roaster (220 N. 56th St., Seattle) Happy Savage & Dana Lyons

Suburban elk study underway in Spokane County

What do you do when a growing human population runs headlong into a growing elk population?

If you're WDFW's urban wildlife biologist Howard Ferguson, you set out to learn more about the elk so you can come up with solutions to people-elk problems.

Earlier this year Howard initiated a study of the resident (non-migrating) elk population in southern Spokane County, where the rural landscape has shifted in recent years to suburbia and where apparently increasing numbers of elk are damaging everything from fences to roses and posing road collision hazards.

The first step was to equip a sample of the elk with radio telemetry collars so they could be tracked to determine more about their numbers, habitat usage, home range, travel patterns and corridors used across the county, and other information. That meant capturing elk, which Howard learned was not an easy task after a month-long attempt to bait them with alfalfa into a trap failed.

"Plan B" used a helicopter crew to capture elk using nets shot from a gun, then ground crews to handle the tangled animals and fit them with radio collars. Ground crews of WDFW staff, Inland Northwest Wildlife Council volunteers, and Eastern Washington University wildlife biology students equipped 19 elk with radios in just a few days.

Within the first week of the study, monitoring showed that one elk was lost to a poacher.

The other 18 elk have continued to be tracked regularly throughout the county.

One of the more surprising movements was

a 40-mile excursion by a cow elk just before the calving period in late May.

Howard hopes to equip at least five more elk with radios early next year to expand and continue the study. One of the many things he hopes to learn is where and when how many elk cross State Highway 195, which runs north-south and bisects the county. With apparently increasing incidents of elk-vehicle collisions, and state transportation officials beginning to plan improvements on that route, the information could help determine if wildlife underpass, overpass, warning signs or other steps are needed.



Living with Washington's wildlife: raccoons

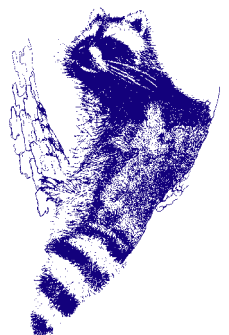
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touch, or feed raccoons. If a raccoon ever approaches too closely, make yourself appear larger (stand up if sitting), shout, and wave your arms. If necessary, throw stones or send the raccoon off with a good dousing of water from a hose or bucket. If a raccoon continues to act aggressively or strangely (circling, staggering as if drunk or disoriented, or unnatural tameness), call your local WDFW office for assistance.

To prevent problems with raccoons, take the following steps: ***Use garbage cans with tight-fitting lids.** To keep a lid on tight, secure it with rope, chain, bungee cords, or weights, or buy cans with clamps or other mechanisms. To prevent you attempt to live-trap problem

raccoons yourself, make sure there are no young in the den and if so, make sure they are mobile. Use baited cage traps and release raccoons onsite after dark and after all entrances have been sealed. Monitor the site to make sure no raccoons are stranded inside.

Relocating problem raccoons off site is not recommended because they are unlikely to survive, can cause damage elsewhere, or can spread disease to other wildlife and people.



Fall is water maintenance time continued from page 1

them to first land and then wade in to a comfortable depth.

- Keep the water shallow—typically 1 to 3 inches at its deepest point—since most birds bathe in water that is no deeper than their legs are long. Many birdbaths go unused because the water is too deep.
- Few birds will try to bathe in a bath that has a slippery surface, though they may perch on the edge to drink. A rough-textured bowl is much preferred.
- Avoid birdbaths with edges that turn up sharply or that are made of materials (like plastic) that can easily crack with temperature changes. When water freezes, it expands about 10 percent. The ice will exert pressure against an edge and crack the birdbath. Shallow concrete basins are probably your best bet.

If you fall in love with a birdbath that is too deep, steep, or slippery for birds, you may be able fix the problem by adding flat rocks. Bathtub stickers or caulk sprinkled with sand also provide traction on slippery surfaces. Bathtub stickers or caulk sprinkled with sand also provide traction on slippery surfaces.

Any size birdbath may be used by birds. However, the bigger the birdbath the more birds will use it at the same time and the easier it may be to maintain through the winter. For communal bathing, a birdbath should be at least 18 inches in diameter.

Ground-level birdbaths, or dipping pools, are an especially attractive feature in a garden and may be preferred by some bird species. They can be made larger than a standard birdbath and may attract other wildlife, such as treefrogs, that might not visit a birdbath on a stand. However, because they are at ground level, they may put birds at greater risk from local cat. They also may be tougher to maintain through the winter in areas where below-freezing temperatures are common.

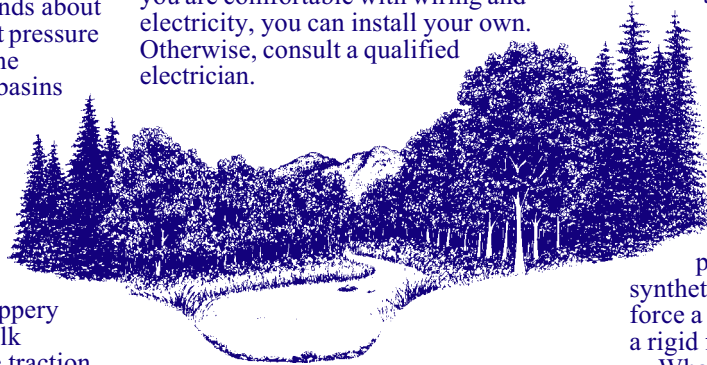
To be sure a birdbath is a reliable source of water, keep it from freezing between dawn and nightfall, when birds are active. The water need only be kept just above freezing.

You can keep a birdbath free of ice by pouring warm water into the bowl, but this is tedious in extreme cold weather, as the water freezes rapidly. A stick of wood left in the water during cold snaps can help you pop out ice so you can add fresh water. (If the water does freeze, the stick

will also help to prevent the birthbath from cracking.)

Birdbaths equipped with submersible, thermostatically controlled heaters will save you time. Small heaters designed to operate at a depth of one to three inches are available at garden stores and hardware centers, and through mail-order catalogs.

You will need a source of electricity to run your birdbath heater. Exercise caution here. Outdoor outlets should be on a circuit or outlet protected by a ground fault circuit interrupter (GFCI), which will cut off the flow of electricity in the event of a short. Most outlets in newer homes are protected by GFCI. If yours isn't and you are comfortable with wiring and electricity, you can install your own. Otherwise, consult a qualified electrician.



When using a heater, keep the birdbath full of clean water or you may ruin the heater and your birdbath. Some heaters are equipped with automatic shut-off systems when no water is detected and may be worth the extra cost.

Keeping water available in your birdbath year-round means you have year-round cleaning responsibilities. Diseases can spread quickly and easily in an untended birdbath, especially during seasons when you are also providing feed nearby. Change the water every few days in a small bath, and rinse a dipping pool every week with your hose, to get rid of regurgitated seeds and other debris. Change water more often if many birds are using the bath. (Locating your birdbath near a hose will make refilling and cleaning easier.)

Scrub small baths a few times each month with a plastic brush to remove algae and bacteria. Never add chemicals to kill algae or insects or to keep the water from freezing in your birdbath. Efforts needed to care for backyard wildlife **ponds** in fall and winter are also dictated by their type, size, and location.

A pond with water circulating through an electrical pump is easier to keep ice-free. Of course you also have to maintain your

pump system, whether it's submersible or surface, or opt to winterize the system.

Without circulating water, and depending on the size and depth of your pond and the severity of your area's winter temperatures, you might consider a pond heater. All of the precautions about electrical sources noted above about birdbath heaters apply, whether you choose to keep pond water open by a pump or heater.

A larger pond is generally easier to maintain through winter than a smaller one. Pond liners made with flexible materials are impervious to freezing.

Winter is a good time to test for water table depth if you are just now

thinking about adding a pond to your backyard sanctuary. Dig a test hole the same depth as your proposed pond and observe it for 24 hours for signs of water; if the hole fills with water on a no-rain day, your water table is high in that spot. While a low spot quickly fills with water may be a great location for amud-lined pond, it's not ideal for one with a synthetic liner. A high water table can force a flexible liner to bubble up and pop a rigid fiberglass liner out of the ground.

Whatever your pond type, fall is the time for major clean up.

After a storm de-leaves area trees, try to limit the amount of leaves that enter your pond. Fallen leaves can make the water too acidic for many life forms, and decomposing leaves rob the water of dissolved oxygen. Fallen leaves and needles also can clog pumps. Don't worry about removing every leaf; a three-inch layer of decaying vegetation on the pond's bottom is OK if the pond is getting enough oxygen from live plants or a fountain. Aquatic insects, frogs, turtles and even some fish will burrow into the debris for the winter.

Pull a garden rake through the water to not only collect fallen leaves, but also to clear out excess growth of floating-leaf plants such as duckweed. When cleaning a pond, let collected vegetation sit at the pond's edge overnight to allow excess water to drain and any aquatic wildlife to escape.

To keep the pond partially clear of leaves, place black nylon netting over its surface in the fall. After cleaning the netting, you can replace it tightly over the pond's surface to keep fish safe from predators throughout the winter.

◆ ◆ ◆ Learning to listen ◆ ◆ ◆

Excerpted from an article by Mary Taylor Young

Have you ever sat around a campfire after dark and listened to the night sounds? When the surrounding darkness and the light from the fire erase your powers of sight, the richness of the world of sound emerges.

But you don't have to enjoy listening only when your vision is restricted. We talk about bird watching and wildlife viewing, but listening is a marvelous way to experience another dimension of wildlife.

It sounds a little silly to tell people how to listen, but attentive listening is a skill that takes some practice.

When people lived close to nature, listening to the world around them was essential—for finding food, for defense and just to keep tabs on what was going on around them.

But today a cacophony surrounds us in the modern world—traffic, heavy equipment, television, radios, sirens, barking dogs—blending into a mass of noise we want to ignore. We've trained ourselves to tune out much of the sounds around us.

To hear wildlife and the sounds of nature, we must now train ourselves to tune in.

Birders — people with a serious interest in birdwatching — often have excellent listening skills. Because birds are frequently difficult to see, birders learn to listen as well as watch. Sound is often the primary sense for locating birds, as birders zero in first by ear and then search with their binoculars. Even then, they may never get a good look at their quarry, which is often high in trees obscured by foliage.

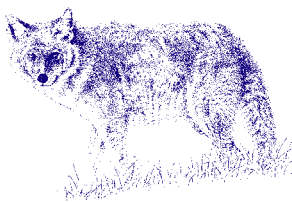
So birders learn not just to listen, but to identify birds by their calls and songs. That trained ear kept tuned to sounds around them means their conversation is often interrupted with, "Oh, did you just hear that downy woodpecker fly across the yard?... Listen, there's a song sparrow!... Wasn't that a western screech-owl?"

While birders listen in order to identify the sound, many of us don't have any particular mission other than enjoying what we hear. To practice listening, go in your backyard, or somewhere outdoors, sit down and close your eyes. Pay attention to all you hear. Practice locating the source of sounds by turning your head. Now go through the same exercise with your eyes open, but focusing on your sense of hearing rather than sight.

When you go out in the field, you can

listen while on the move, but sitting quietly will be more productive. Once you are still, wildlife that may have fled or hidden at your approach will re-emerge. One day while on a hike, I sat down to rest and soon heard scratching and rustling nearby. I was in the open with no creatures in sight. Suddenly the soil trembled and up popped a pocket gopher, which busily bulldozed out a load of dirt and submerged again to keep tunneling. I would not have seen or heard the gopher, an animal rarely if ever seen, if I'd been on the move.

Humans have woefully small external ears, so lots of sounds pass us by.



Compare our flat-to-the-head ears to the radar-dish ears of a fox, mule deer or big-eared bat. You can vastly improve your ability to capture sounds by cupping your hands around your ears. Pivot slowly (remember that radar dish) and use the changes in volume and amount of sound to either ear to pinpoint the source of what you're hearing. When it seems each ear is receiving sound equally, you are looking straight at your target.

Owls, which can hunt completely by sound, use the same technique to locate prey. As the owl orients its head to equalize sound to its ears (which, unlike ours, are asymmetrical), the source of the sound is aligned to the bird's line of vision, and it targets in for the attack. Owls can pinpoint and strike a prey animal accurately to within a fraction of an inch, even in total darkness, using only sound.

One trick used by birders to locate a hidden bird by sound is a basic form of triangulation. The people in the group spread apart, then all listen to the sound. As they pinpoint the direction, each listener raises an arm and points to it. The place where lines from all the pointing arms come together is the likely location of the hidden bird.

Some nature centers have specialized microphones they use to listen to nature sounds, often on nighttime walks. These highly sensitive listening devices have a large dish surrounding a parabolic microphone. When pointed at sounds, or even used to scan a forest or meadow, they amplify an amazing variety of sounds

that are too quiet or distant to be heard by the average human ear. These aids to hearing let us experience the world of sound familiar to so many animals but usually closed to humans.

Some birders and nature enthusiasts play tapes of bird songs and calls to elicit response from wild birds. Tapes are particularly used to find owls, which are secretive and nocturnal. This technique can have a negative effect on birds, however. During the nesting season, birds might expend energy responding to what they think is an intruder in their territory. The overplaying of tapes can stress birds enough to cause them to abandon nests. Better to just enjoy the night sounds and count any owls we hear naturally as a wonderful gift.

Your Backyard Wildlife Sanctuary is filled with the sounds of wildlife. Often they are the sounds of everyday life in the natural world—rustles and scuffles, alarm calls, wingbeats, splashing—that clue us to the animals around us. Much of the noise of nature is associated with specific seasons and behaviors.

Springtime brings the sounds of romance and territorialism. Of all these, the songs of birds are perhaps the most familiar and best loved. Songs are usually standardized series of notes or phrases typical to a species and used to define territory and attract mates. That's why the singing of birds is heard mainly in spring and summer, the seasons of courtship and rearing of young, but not in winter.

Bird calls, on the other hand, have practical function—to warn of danger, to announce capture of prey, to protest disturbance or to communicate in other ways—and are therefore heard throughout the year. The familiar *tsik-a-dee* of the chickadee is not its song but its call. A whistling, two-toned *fee bee* is the bird's song. A feeding flock of chickadee gives continuous calls, the members keeping in touch with each other as they forage for food.

Not all the sounds of bird courtship and territoriality are vocal. Being shy on musical voice but very good in the hammering department, woodpeckers drum with their bills on resonant surfaces—dead trees, telephone poles, metal roof flashing—to announce their territories and attract mates. Snipes "winnow," producing an airy *whuh, whuh, whuh* flight sound as air rushes through the fanned feathers of their tails. Nighthawks

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Spread the word with a “Salmon Friendly Lawn” sign

If you take care of your lawn in an environmentally responsible way, you can get a free “Salmon Friendly Lawn” yard sign to spread the word.

The Snohomish County chapter of the Sierra Club and Project SeaWolf are offering the free signs for those who use no pesticides, fertilizers, nor herbicides, contribute no toxic runoff that pollute streams, and water lawns only minimally.

The sign is made of heavy, water-resistant paper and might best be saved for display next spring. Check out Sea Wolf’s “Oceanic Navigator” at <<http://home.earthlink.net/~projseawolf/spring2001.pdf>> to see the sign design.

The “covenant” that comes with the sign, endorsed by many other local environmental groups, reads in part: “Thanks immensely for taking a part in this wonderful public education effort! By placing one of these signs in your yard, you are helping to educate friends and neighbors about the vibrant connection between our lawns, and the rivers and streams running into the great Puget Sound all around us!

“As an environmentally-friendly homeowner, you have also pledged to limit your use of toxic chemicals and dangerous herbicides, pesticides and fertilizers, to limit your level of yard watering, and to practice new and improved methods of lawncare such as using a mulching mower, or “grass-cycling,” which means leaving your grass clippings on the lawn after cutting to help naturally fertilize your garden!

You’re taking an important step to improving the health of our neighborhoods too. The health of our ecosystems is influenced by what we, as homeowners, do to our yards. Most people don’t realize how much damage some of our lawncare chemicals can do to the plants and animals living in the streams and rivers around us. Every time it rains, these chemicals wash off our lawns and driveways, into the stormwater drains and into local rivers and streams. Chemicals can harm birds and fish, and fertilizers promote the growth of algae that choke streams and rob fish of valuable oxygen.

Pesticides can also be very dangerous to children and pets.

You’ll also be doing your part to help conserve water by limiting the amount you use on your lawn. Research has shown that up to 40% of our summer water supply is used by lawn watering. By adopting a few new gardening habits, you can help to reduce the amount of water you use, while also decreasing the size of your utility bill!

We hope that your new lawn sign will generate some productive discussion among your neighbors. By placing this sign in your lawn, you’ve made it clear that you understand the role that all of us must play in protecting our salmon, our eagles, our whales and our entire ecosystem! You should be proud of the example that you are setting - we certainly are!”

To order your sign, send a self-addressed, stamped envelope (.55 cents postage) at least 6" x 9", to SeaWolf, PO Box 929, Marysville, WA 98270. Any donations to help pay for printing are welcome.

Learning to listen continued from page 5

“boom,” another flight sound made as the bird plummets downward then curves up suddenly in a “J” pattern, the air forced through its wing feathers making a loud *szhoomp*. Listen for snipes over wet meadows nearby statewide in spring and summer and nighthawks in morning and evening in most habitat across the state in summer, including urban areas

Birds aren’t the only animals vocalizing during the breeding season. Frogs and toads croak, sing and trill, the rising drone of their calls sometimes heard for a mile or more. The chorus frog sounds like someone running a thumb down a comb, rising in pitch. The Woodhouse toad gives a very loud, bawling *Waaab!* The bullfrog’s song is a deep, loud *Jug o rum*. The leopard frog offers up a long snore, tapering to a series of croaks. The spadefoot toad emits a series of distinct quacks at one-second intervals. The western toad makes a soft chirping, like the cheeps of a baby chick.

In autumn, the eerie bugle of the bull elk, starting deep and hollow and rising to a shrill scream, echoes through mountain forests and meadows. With his bugle the bull challenges competing males and announces his readiness to breed. Later

in the season, in late November and December, lucky listeners may hear the clash of horns as bighorn sheep rams battle each other during the rut. The crash of two rams battering head to head can sometimes be heard a mile or more away.

Encountering interesting sounds, and the sights they lead to, is often serendipitous when we are on the trail or just poking around outdoors. Pay attention to sudden changes in wildlife sounds. If a lively woodland grows suddenly quiet, or a silent place explodes in chatter or alarm calls, it probably means something is afoot, perhaps the approach of a predator or your own nearness to a nest.

In mid-summer the frenzied chatter of a songbird may be a fledgling bird, one that has just left the nest, still begging its harried parents for food—*Feed me! Feed me!* The furious scolding of a squirrel announces that you are trespassing, and doesn’t subside till you have passed through its territory. Rustling in dry leaves and underbrush may make you think a large animal hides just off the trail, but often these sounds are much larger than the animals that make them. Spotted towhees, songbirds about the size of slender robins, scuffle in the leaf litter

looking for grubs and insects, making enough noise for an army of imagined predators.

If you are near a herd of elk, you may hear all sorts of chatter. Elk are quite vocal—the calves mew, the adults grunt and “talk” to each other. A herd of elk feeding or moving through a forest can be very noisy, walking over things and rustling in the vegetation; when elk want to escape, though, they can do so very quietly.

Listen for sounds of alarm in nature. Deer may stamp a foot and snort an alarm before fleeing. The beaver’s noisy slap of its flat tail on the water is a warning that carries far across the water to other beavers. Many birds cry alarms when nests are threatened. The rattlesnake’s alarm is one sound you may not be eager to hear, but be glad of the warning that rattling tail gives.

Of all the sounds of Washington wildlife perhaps none is so evocative as the cry of the song dog. Though coyotes are not always seen, when their howling rises in the night, the sound touches a chord inside us—a yearning for wild things—that is stronger than any visual image.

◆ ◆ ◆ It's crow time! ◆ ◆ ◆

Fall and winter sets the stage for the rock-and-roll show of the backyard bird world: crows are seen in large, raucous flocks that roam widely and gather in trees in huge communal roosts at night.

Crows are not inherently bad birds, of course. They eat a lot of destructive insects, clean up carrion and garbage, and do not - contrary to popular opinion - have a significant impact on songbirds, which they are known to prey upon. Crows are also not any more dangerous in terms of spreading infectious disease than any other birds.

But in mass at this time of year, especially in the wee hours of the morning, they are obnoxiously loud. And their droppings underneath a roost tree can get to piling up pretty darn high and deep.

So what to do when you've had enough of crows?

Get into the Halloween spirit and try some scaring devices. But be prepared to have quite a repertoire in your bag of tricks. You're not dealing with any "bird brain" when it comes to crows.

The brain, as a matter of fact, is especially well developed in the corvids - crows, ravens, jays, and magpies - a family of birds always considered intelligent for their ability to adapt quickly to changing circumstances. Like many corvids, crows can distinguish a person holding a gun from one holding a walking stick. After brief experience, they even recognize a former hunter even when he or she is unarmed.

Given that, putting the old owl decoy

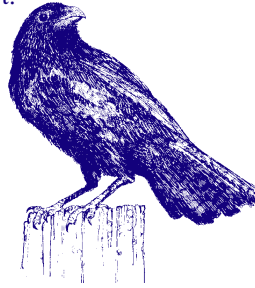
up in the tree probably won't work well; in fact, crows might actually gather to mob it.

Try auditory scaring devices instead. But keep in mind that these work best when crows have not been using a roosting site for very long, and they're usually effective for less than a year.

Also consider that the crows may simply move to a neighbor's property, so you may want to enlist your whole neighborhood in a team effort.

Auditory scare devices include pyrotechnics such as cracker shells, firecrackers, and propane cannons, and recorded warning calls. These generally require permits from area police departments or may be restricted by noise ordinances. Devices that play recorded warning calls can be set up to operate automatically. (Some of the calls advertised as warning calls may actually be distress calls, which may draw crows to your site!)

Use mobile sound equipment so the location of the sound can be changed. Try to elevate pyrotechnics above the crows. Use of auditory scare devices should begin at least 1½ hours before dark, when the first birds are coming in to roost; it should stop with darkness. Do not continue any longer because the crows will just become accustomed to the sounds. Play alarm calls only 10-15 seconds every minute when the birds are



coming in. When most of the birds are perched, play the call continuously until dark. Early morning scaring also can be used in conjunction with evening scaring and should begin as soon as the first bird movement is detected in the roost, often just before daylight.

If you've got or know kids with energy to burn, put them to work near the crow roost trees with a low-tech method — beating on tin sheets or barrels with baseball bats.

Scaring roosting crows often takes four to five nights (or more!) of continuous effort until the birds move to an acceptable area. Auditory scaring devices can provide effective short-term control, especially when they are used in combination.

If you're not inclined to add to the crow noise with these techniques, try spreading nylon netting to create a barrier in the roost trees. Or spray crows with water from a high-pressure hose or from a 360-degree sprinkler mounted in the roost tree. Or illuminate the tree with high wattage lights (or be the first in your neighborhood to put holiday lights out!) These intervention strategies must be continuous and concentrated to be effective.

At last resort, you can try to modify the structure of the night roost to discourage crows. Thin up to 50 percent of the branches of roost trees, or remove some trees from dense groves to reduce the availability of perch sites and open the trees to the weather.

Signs of the season

After deciduous trees shed their leaves you can easily spot the large tree nests that squirrels built earlier in the year. Sometimes squirrels continue to use these overstuffed structures for winter roosts.

During the winter, look for holes in the snow where tree squirrels retrieved stored cones. The confetti-like litter from these stashed treats can often be found on top of the snow underneath the squirrels' treetop "dining rooms."

If you can detect where squirrels are holding quarter through the winter, you might try offering them their own food nearby to dissuade them from robbing bird feeders in other parts of your yard. No guarantees, but maybe worth a shot!

Where do bats winter?

Ever since discovering a maternal colony of rare Townsend's big-eared bats in northern Spokane County in 1999, WDFW's urban wildlife biologist Howard Ferguson has been wondering where they spend the winter.

The very limited literature on this species suggests that winter "hibernacula" or roost sites are probably not more than 25 miles away from where the bats are born, he says. And knowing just where that is could help protect that part of the bats' habitat, he figures.

So he set out to track the bats just before they left their birthplace in September. First he captured a sample of 11 individuals from the colony of about 200, using a butterfly-like net, and

affixed tiny (size of a small fingertip) radio telemetry transmitters to each of their backs. The transmitter batteries last just three weeks, and then the radios simply fall off the bats. Volunteers helped Howard track the bats, both from the air and on the ground.

At the time of this writing, most of the bats were located within 15 miles of the maternal roost, but surprisingly not together - they were scattered in various habitats, including caves, trees in dense forests, and snag cavities.

Howard plans to capture and equip more bats next year to learn more about them.



**Washington Department
of Fish and Wildlife
Backyard Wildlife Sanctuary Program**

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